## Navajo Technical University

| Name: | <br>ID#: |  |
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## **Associate of Applied Science – Chemical Engineering Technology (75-76 Credits)**

Chemical Engineering and Process Technologists and Technicians work on industrial processes designed to convert raw materials into petroleum products. Since the Four Corners region has significant oil and gas fields, there are a number of refineries and other oil and gas related operations throughout the area. Technologists run production units, help design operations, implement process controls and address corrosion concerns. They do these tasks both in the field and in large plants. They also research products and technologies as well as environmental and reclamation techniques. Environmental reclamation, given the number of abandoned mine sites on the Navajo Nation and in Arizona, Utah, and Colorado, provides jobs throughout Navajo Tech's service area.

| Semester ONE                |   | Credits | Prerequisite                          | Semester/Transfer | Grade |
|-----------------------------|---|---------|---------------------------------------|-------------------|-------|
| MATH 1220                   | College Algebra                                 | 4       | MATH 1215                             |                   |       |
| ENGL 1110                   | Composition I                                   | 3       | ENGL 100                              |                   |       |
| CHEME 115                   | Introduction to Process Technology              | 3       |                                       |                   |       |
| ENGR 103                    | Introduction to Engineering                     | 3       |                                       |                   |       |
| CHEM 1120C                  | Introduction to Chemistry                       | 4       |                                       |                   |       |
| SSC 100                     | College Success Skills                          | 1       |                                       |                   |       |
| Semester TWO                |   |         |                                       |                   |       |
| BCIS 1115                   | Introduction to Computers                       | 3       |                                       |                   |       |
| MATH 1230                   | Trigonometry                                    | 4       | MATH 1220                             |                   |       |
| Dine Studies                | NAVA1110, NAVA 2210 OR NAVA 2230                | 3-4     |                                       |                   |       |
| CHEM 1217C                  | Principles of Chemistry I                       | 4       | MATH 1220,<br>CHEM 1120C              |                   |       |
| CHEME 117                   | Process Technology I - Equipment                | 4       |                                       |                   |       |
| Semester THRI               | EE.   |         |                                       |                   |       |
| CHEME 119                   | Safety, Health & Environmental I                | 4       |                                       |                   |       |
| CHEME 218                   | Process Technology II System                    | 4       | CHEME 117                             |                   |       |
| CHEM 1225C                  | General Chemistry II for STEM Majors            | 4       | CHEM 1217C                            |                   |       |
| CHEME 202                   | Industrial Chemistry and Lab                    | 4       | CHEM 1120                             |                   |       |
| CHEME 222                   | Fundamentals of Chemical Engineering            | 4       | MATH 1220 or<br>Instructor Permission |                   |       |
| Semester FOUL               | ₹   |         |                                       |                   |       |
| CHEM 2130C                  | Organic Chemistry I                             | 4       | CHEM 1225C                            |                   |       |
| CHEME 223                   | Petroleum Refinery Engineering & Petrochemicals | 4       | CHEM 1120 or<br>Instructor Permission |                   |       |
| CHEME 224                   | Quality Control in Chemical Engineering         | 4       | MATH 1220                             |                   |       |
| CHEME 231                   | Process Technology III-Operations               | 4       | CHEME 218                             |                   |       |
| CHEME 230                   | Practicum in Industry                           | 3       |                                       |                   |       |
| TOTAL REQUIRED CREDIT HOURS |   | 75-76   |                                       |                   |       |

|                  | Signatures | Date |
|------------------|------------|------|
| Student:         |            |      |
| Advisor:         |            |      |
| Registrar:       |            |      |
| Graduation Date: |            |      |

Updated 4/27/2024